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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/724,807	12/01/2003	Tim Schnell	5034-002	3683
24112	7590	03/08/2005	EXAMINER	
COATS & BENNETT, PLLC P O BOX 5 RALEIGH, NC 27602			TORRES, ALICIA M	
			ART UNIT	PAPER NUMBER
			3671	

DATE MAILED: 03/08/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b> 10/724,807	<b>Applicant(s)</b> SCHNELL, TIM	
	<b>Examiner</b> Alicia M Torres	<b>Art Unit</b> 3671	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 16 December 2004.  
 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.  
 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1,2,4,6,7,10,11,13,14 and 16-34 is/are pending in the application.  
     4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.  
 5) ☒ Claim(s) 31, 32 is/are allowed.  
 6) ☒ Claim(s) 1,2,4,10,11,16,18,19,21-28,31,33 and 34 is/are rejected.  
 7) ☒ Claim(s) 6,7,13,14,17,20 and 29 is/are objected to.  
 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.  
 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
     Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
     Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  
 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
     a) ☐ All    b) ☐ Some \*    c) ☐ None of:  
         1. ☐ Certified copies of the priority documents have been received.  
         2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
         3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  
     \* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## DETAILED ACTION

### *Claim Rejections - 35 USC § 102*

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 18 and 19 are rejected under 35 U.S.C. 102(b) as being anticipated by Miller et al., hereafter Miller.

3. In regards to claims 18 and 19, Miller discloses a gang type lawn mower system adapted to be pulled behind a tractor, comprising;

a. a power source frame (F) adapted to attach to the tractor and having an area for receiving and supporting an internal combustion engine (15) thereon;

b. an internal combustion engine (15) mounted on the power source frame (F) and having an output power shaft (16) extending therefrom;

c. the power source frame (F) having a plurality of wheels (48) and a pair of opposed side areas (see figure 1);

d. at least two mower decks (67) movably mounted to the power source frame (F), each mower deck (67) movably mounted to one side area of the power source frame (F) such that the power source frame (F) lies between the two mower decks (67) and wherein each mower deck (67) is operative to move independently of the power source frame (F);

e. each mower deck (67) having a blade (72) associated therewith for cutting grass;

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f. a drive (16, 27, 31) extending from the power source frame (F) to each of the mower decks (67) and wherein the drive (16, 27, 31) transfers power from the internal combustion engine (15) to each of the mower decks (67) so as to drive the blades (72) associated with the mower decks (67);

g. each mower deck (67) being movable with respect to the power source frame (F) from a lowered operative position for cutting grass to an elevated stowed position;

h. wherein in the elevated stowed position each mower deck (67) is turned at least partially on the mower deck's (67) side such that an underside of the mower deck (67) faces outwardly or at least slightly upwardly; and

i. wherein the mower decks (67) are exclusively driven by the internal combustion engine (15) mounted on the power source frame (F) that in operation trails the tractor, as per claim 18; and

wherein each mower deck (67) is pivotally connected to one side of the power source frame (F) through one or more pivot connections (85) that permit each mower deck (67) to swing about a longitudinal axis that extends adjacent the side area of the power source frame (F), as per claim 19.

### ***Claim Rejections - 35 USC § 103***

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

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5. Claims 1, 2 and 16, 21, 22, 26, 27 are rejected under 35 U.S.C. 103(a) as being unpatentable over Miller et al., hereafter Miller, in view of Aron.

Miller discloses a gang type lawn mower system adapted to be pulled behind a tractor, comprising:

- a. a wheel supported main frame (F);
  - b. a power source (15) mounted on the main frame (F);
  - c. at least two mower decks (67) connected to the main frame (F), each mower deck (67) having a rotary blade (72);
  - d. each mower deck (67) being movably mounted to the main frame (F) and movable from an operative lowered position (see figures 1 and 2) where the mower deck (67) is operative to cut grass to an elevated stowed position (see figure 4) where at least a portion of the mower deck (67) overlies a portion of the main frame (F); and
  - e. a drive (27, 31, 37) interconnected between the power source (15) and each of the mower decks (67) for driving each of the mower decks (67) whereby the mower decks (67) are driven by a single power source (15) mounted on the main frame (F), as per claim 1; and
- wherein the main frame (F) lies between two mower decks (67), and wherein in the lowered operative position the mower decks (67) extend outwardly from the main frame (F);
- a. wherein the main frame (F) does not include a blade for cutting grass; and
  - b. each mower deck (67) being pivotally connected along one side of the main frame (F) such that when the mower deck (67) assumes a stowed position, the underside of the mower deck (67) faces at least partially upwardly and the entire mower deck (67) is supported by the main frame (F), as per claim 2; and

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wherein the main frame (F) includes an upper platform (top of main frame F, see figure 3) having the power source (15) mounted thereon, as per claim 16.

However, Miller fails to disclose wherein in moving from the operative position to the stowed position each of the mower decks move through an angle of at least  $91^{\circ}$ , as per claim 1; and

Wherein in the stowed position at least a portion of the apparatus overlies a portion of the mainframe, as per claim 21; and

Wherein in the stowed position the underside of the apparatus faces upwardly and at least slightly outwardly, as per claim 22; and

wherein each mower deck is movable through an angle of at least  $91^{\circ}$  when moving from the operative position to the stowed position, as per claim 26; and

wherein each deck is pivotally connected to one side of the power source frame and pivotable through an angle of at least  $91^{\circ}$  as the mower deck moves between the operative and stowed position, as per claim 27.

Aron discloses a similar device wherein in moving from the operative position to the stowed position each of the apparatuses (3, 4) move through an angle of at least  $91^{\circ}$  (see column 3, lines 27-31), as per claim 1; and

Wherein in the stowed position at least a portion of the apparatus (3, 4) overlies a portion of the mainframe (2), as per claim 21; and

Wherein in the stowed position the underside of the apparatus (3, 4) faces upwardly and at least slightly outwardly, as per claim 22; and

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wherein each apparatus (3, 4) is movable through an angle of at least  $91^{\circ}$  when moving from the operative position to the stowed position, as per claim 26; and

wherein each apparatus (3, 4) is pivotally connected to one side of the main frame (2) and pivotable through an angle of at least  $91^{\circ}$  as the apparatus (3, 4) moves between the operative and stowed position, as per claim 27.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to include the pivot angle of Aron on the device of Miller in order to reduce the bulk of the machine.

6. Claims 4 and 30 are rejected under 35 U.S.C. 103(a) as being unpatentable over Miller and Aron and further in view of Allison.

The device is disclosed as applied above. However, Miller and Aron fail to disclose wherein the drive interconnected between the power source and the mower decks include a belt drive; and wherein the gang type lawn mower system includes a belt tensioner for maintaining a tension on the belt drive, as per claims 4 and 30.

Allison discloses a gang mower wherein the drive interconnected between the power source (29) and the mower decks (25, 26) include a belt drive (37); and wherein the gang type lawn mower system includes a belt tensioner (36) for maintaining a tension on the belt drive (37), as per claims 4 and 30.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to include the tensioner of Allison on the drive of Miller and Aron in order to tighten the belt.

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7. Claims 10 is rejected under 35 U.S.C. 103(a) as being unpatentable over Miller and Aron and further in view of Torras, as cited by applicant.

The device is disclosed as applied to claim 1 above. However, Miller and Aron fail to disclose wherein the main frame includes at least two spaced apart caster wheels disposed on the front portion of the main frame.

Torras discloses a mower frame (30) including at least two spaced apart caster wheels (26, 27) disposed on the front portion of the main frame (30).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to include the caster wheels of Torras on the mower of Miller and Aron in order to allow the mower to undulate and pivot.

8. Claim 11 is rejected under 35 U.S.C. 103(a) as being unpatentable over Miller and Aron and further in view of Erdman, as cited by applicant.

The device is disclosed as applied to claim 1 above. However, Miller and Aron fail to disclose at least one belt guard extending from the main frame over a portion of one mower deck for guarding a belt drive that forms a part of the drive interconnected between the power source and the mower decks, as per claim 11.

Erdman discloses a pull-behind gang mower including at least one belt guard (122, 124) extending from the main frame (64) over a portion of one mower deck (16, 18) for guarding a belt drive (118) that forms a part of the drive interconnected between the power source (116) and the mower decks (16, 18), as per claim 11.



It would have been obvious to one having ordinary skill in the art at the time the invention was made to include the guards of Erdman on the device of Miller and Aron in order to provide protection.

9. Claims 23-25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Miller and Aron as applied to claim 1 above, and further in view of Bottenberg.

The device is disclosed as applied above. However, the combination fails to disclose including a tongue pivotally connected to the mainframe about a transverse axis such that the tongue can move up and down about the axis, as per claim 23; and

including front and rear wheels secured to the mainframe, as per claim 24; and

including a tongue pivotally connected to the mainframe about a transverse axis such that the tongue can move up and down with respect to the mainframe about the axis; and wherein there is provided front and rear wheels mounted to the mainframe, as per claim 25.

Bottenberg discloses a similar gang mower including a tongue (18) pivotally connected to the mainframe (16) about a transverse axis such that the tongue (18) can move up and down about the axis, as per claim 23; and

including front (92) and rear (22) wheels secured to the mainframe (16), as per claim 24; and

including a tongue (18) pivotally connected to the mainframe (16) about a transverse axis such that the tongue (18) can move up and down with respect to the mainframe (16) about the axis; and wherein there is provided front (92) and rear (22) wheels mounted to the mainframe (16), as per claim 25.

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It would have been obvious to one having ordinary skill in the art at the time the invention was made to include the pivotable hitch of Bottenberg on the device of Miller and Aron in order to achieve different cutting heights.

10. Claims 28 and 33 are rejected under 35 U.S.C. 103(a) as being unpatentable over Miller in view of Bottenberg.

11. In regards to claim 28, Miller fails to disclose front and rear wheels mounted to the power source frame; and a tongue pivotally connected to the power source frame and projecting therefrom and wherein the tongue is pivotally mounted about a transverse axis such that the tongue can be moved up and down about the axis, and with respect to the power source frame.

Bottenberg discloses front (92) and rear (22) wheels mounted to the frame (16); and a tongue (18) pivotally connected to the frame (16) and projecting therefrom and wherein the tongue (18) is pivotally mounted about a transverse axis such that the tongue (18) can be moved up and down about the axis, and with respect to the frame (16).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to include the pivotable hitch of Bottenberg on the device of Miller in order to achieve different cutting heights.

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12. In regards to claim 33, Miller discloses a gang type lawn mower system adapted to be pulled behind a tractor, comprising:

- a. a wheel supported mainframe (F);
- b. a power source (15) mounted on the mainframe (F);
- c. at least two mower decks (67) connected to the mainframe (F), each mower deck (67) having a rotary blade (72);
- d. each mower deck (67) being movably mounted to the mainframe (F) and movable from an operative lowered position where the mower deck (67) is operative to cut grass to an elevated stowed position;
- e. a drive (27, 31, 37) interconnected between the power source (15) and each of the mower decks (67) for driving each of the mower decks (67) whereby the mower decks (67) are driven by a single power (15) source mounted on the mainframe (F).

However, Miller fails to disclose:

- f. four wheels secured to the mainframe for supporting the mainframe;
- e. a tongue pivotally connected to the mainframe about a transverse axis that permits the tongue to move up and down with respect to the mainframe and to pivot up and down about the main axis.

Bottenberg discloses a similar device including:

- f. four wheels (22, 92) secured to the mainframe (16) for supporting the mainframe (16);
- e. a tongue (18) pivotally connected to the mainframe (16) about a transverse axis that permits the tongue (18) to move up and down with respect to the mainframe (16) and to pivot up and down about the main axis.

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It would have been obvious to one having ordinary skill in the art at the time the invention was made to include the pivotable hitch of Bottenberg on the device of Miller in order to achieve different cutting heights.

13. Claims 34 is rejected under 35 U.S.C. 103(a) as being unpatentable over Miller and Bottenberg as applied to claim 33 above, and further in view of Aron.

The device is disclosed as applied above. However, the combination fails to disclose wherein each mower deck is pivotally mounted to the mainframe and movable through an angle of at least  $91^{\circ}$  as each mower deck moves from the operative position to the stowed position.

Aron discloses a similar device wherein each apparatus (3, 4) is pivotally mounted to the mainframe (2) and movable through an angle of at least  $91^{\circ}$  (see column 3, lines 27-31) as each apparatus (3, 4) moves from the operative position to the stowed position.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to include the pivot angle of Aron on the device of Miller in order to reduce the bulk of the machine.

### ***Response to Arguments***

14. In regards to the amendments to the claims, Applicant has failed to disclose the criticality of the movement of the mower decks through at least  $91^{\circ}$ . Barring any new or unexpected results, the rejection of Miller is maintained. Additionally, Applicant has added a new grounds of rejection: Aron discloses a device that rotates through an angle of *about*  $90^{\circ}$ .

*Allowable Subject Matter*

15. Claims 6, 7, 13, 14, 17, 20, 29 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Claims 31, 32 are allowed.

*Conclusion*

16. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

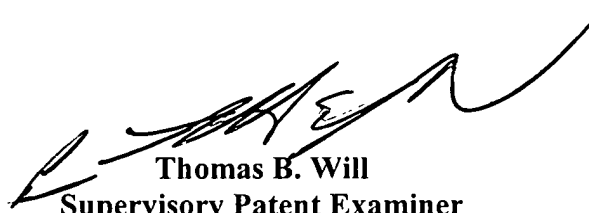
A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

17. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Alicia M. Torres whose telephone number is 703-305-6953. The examiner can normally be reached Monday through Thursday from 7:00 a.m. – 4:30 p.m.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Thomas B. Will, can be reached at 703-308-3870.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the group receptionist whose telephone number is 703-305-1113. The fax number for this Group is 703-872-9306.



**Thomas B. Will**  
**Supervisory Patent Examiner**  
**Group Art Unit 3671**

AMT  
February 23, 2005